Serial No. : 10/577,564

Filed : April 27, 2006

Page 2 of 10: Communication in Response to February 19, 2008 Office

Action

### Amendments to the Claims

Please amend the claims by replacing all prior listings of claims with the listing of claims below pursuant to 37 C.F.R. §1.121:

# Listing of claims:

- 1. (Original) Grain obtained from a rice plant, comprising starch, wherein the proportion of amylose in the starch of the grain is at least 40%.
- 2. (Original) The grain of claim 1, comprising two or more genetic variations, wherein one genetic variation is selected from the group consisting of
  - a) a mutation of an SBEIIa gene which inhibits SBEIIa expression and/or activity, and
  - b) an introduced nucleic acid which inhibits SBEIIa expression and/or activity, and

and wherein a second genetic variation is selected from the group consisting of

- c) a mutation of an SBEIIb gene which inhibits SBEIIb expression and/or activity, and
- d) an introduced nucleic acid which inhibits SBEIIb expression and/or activity.
- 3. (Previously Presented) The grain of claim 1, comprising reduced levels of SBEIIa and SBEIIb proteins and/or activities.
- 4. (Previously Presented) The grain of claim 1, wherein the proportion of amylose in the starch of the grain is at least 50%.

Serial No. : 10/577,564

Filed : April 27, 2006

Page 3 of 10: Communication in Response to February 19, 2008 Office

Action

5. (Previously Presented) The grain of claim 1 which comprises a transgene.

- 6. (Original) The grain of claim 5, wherein the transgene encodes an antisense, co-suppression, ribozyme or duplex RNA molecule.
- 7. (Previously Presented) The grain of claim 1 which is non-transgenic.
- 8. (Previously Presented) The grain of claim 2, further comprising a reduced level of SBEI protein and/or activity.
- 9. (Previously Presented) The grain of claim 1, comprising an altered level of a protein and/or enzyme activity selected from the group consisting of ADP glucose pyrophosphorylase, GBSS, SSI, SSII, SSIII, a debranching enzyme of an isoamylase type and a debranching enzyme of a pullulanase type.
- 10. (Original) The grain of claim 9, comprising an altered level of GBSS protein and/or enzyme activity.
- 11. (Previously Presented) The grain of claim 1 which is non-shrunken.
- 12. (Previously Presented) The grain of claim 1 which is brown rice having an average weight of at least about 25 mg.
- 13. (Previously Presented) The grain of claim 1 wherein at

Serial No. : 10/577,564

Filed : April 27, 2006

Page 4 of 10: Communication in Response to February 19, 2008 Office

Action

least 50% of starch granules within the grain appear nonbirefringent when observed under polarized light.

- 14. (Previously Presented) The grain of claim 1 which has a starch content that is at least 90% of the starch content of equivalent, but unaltered, grain.
- 15. (Currently Amended) The grain of claim 2, <u>further</u> comprising a null mutation of the SBEIIa or SBEIIb gene.
- 16. (Previously Presented) The grain of claim 1 which is of an Indica variety or which comprises a  $Wx^a$  allele.
- 17. (Previously Presented) A rice plant capable of producing the grain according to claim 1.
- 18. (Currently Amended) Rice starch Starch granules, comprising starch, wherein the proportion of amylose in the starch of extracted from the grain is at least 40% according to claim 1.
- 19. (Canceled)
- 20. (Currently Amended) A product comprising rice starch granules, comprising starch, wherein the proportion of amylose in the starch of the grain is at least 40% flour or starch produced from the grain according to claim 1.

# 21-23. (Canceled)

24. (Original) A method of producing a rice plant capable of producing grain, the grain having starch comprising at

Serial No. : 10/577,564

Filed : April 27, 2006

Page 5 of 10: Communication in Response to February 19, 2008 Office

Action

least 40% amylose, comprising the steps of

a) introducing a genetic variation into a parent rice plant or seed; and

b) identifying a progeny plant of the parent rice plant or seed, wherein the starch of grain of the progeny plant comprises at least 40% amylose.

#### 25-36. (Canceled)

- 37. (Original) A method of producing a rice plant having a reduced level of both SBEIIa and SBEIIb proteins and/or enzyme activities in the endosperm which comprises:
  - a) mutagenising seed having a reduced level of SBEIIa protein and/or enzyme activity; or
  - b) mutagenising seed having a reduced level of SBEIIb protein and/or enzyme activity; or
  - c) crossing a plant having a reduced level of SBEIIa protein and/or enzyme activity with a plant having a reduced level of SBEIIb protein and/or enzyme activity; and
  - d) identifying a rice plant having reduced activity of both SBEIIa and SBEIIb proteins and/or enzyme activities in the endosperm.

### 38-42. (Canceled)

43. (Original) An isolated nucleic acid molecule which encodes an inhibitor of rice SBEIIa and an inhibitor of rice SBEIIb, which may be the same or different.

# 44-47. (Canceled)